

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A composition for lanthionizing keratinous fibers to achieve relaxation of said keratinous fibers comprising:
  - (i) at least one hydroxide compound; ~~and~~
  - (ii) at least one oxidizing agent; and
  - (iii) at least one complexing agent effective for dissociating the at least one hydroxide compound in a sufficient quantity to effect lanthionization of keratinous fibers.

~~wherein said at least one hydroxide compound and said at least one oxidizing agent are present in a combined amount effective to relax said keratinous fibers.~~
2. (Original) A composition according to claim 1, wherein said at least one hydroxide compound is chosen from alkali metal hydroxides, alkaline earth metal hydroxides, transition metal hydroxides, lanthanide metal hydroxides, actinide metal hydroxides, Group III hydroxides, Group IV hydroxides, Group V hydroxides, Group VI hydroxides, organic hydroxides, and compounds comprising at least one hydroxide substituent which is at least partially hydrolyzable.
3. (Original) A composition according to claim 2, wherein said at least one hydroxide compound is chosen from sodium hydroxide, lithium hydroxide, and potassium hydroxide.
4. (Original) A composition according to claim 3, wherein said at least one hydroxide compound is sodium hydroxide.

5. (Original) A composition according to claim 1, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 2.5% by weight relative to the total weight of said composition.

6. (Original) A composition according to claim 5, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 2% by weight relative to the total weight of said composition.

7. (Original) A composition according to claim 6, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 1% by weight relative to the total weight of said composition.

8. (Original) A composition according to claim 1, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 0.5% by weight relative to the total weight of said composition.

9. (Original) A composition according to claim 1, wherein said at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates and persalts.

10. (Original) A composition according to claim 9, wherein said at least one oxidizing agent is chosen from hydrogen peroxide.

11. (Original) A composition according to claim 1, wherein said at least one oxidizing agent is present in an amount ranging from 1% to 12% by weight relative to the total weight of the composition.

12. (Original) A composition according to claim 11, wherein said at least one oxidizing agent is present in an amount ranging from 3% to 6% by weight relative to the total weight of the composition.

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13. (Original) A composition according to claim 1, further comprising at least one cation exchange composition.

14. (Original) A composition according to claim 13, wherein said at least one cation exchange composition is chosen from clays.

15. (Original) A composition according to claim 13, wherein said at least one cation exchange composition is chosen from silicates.

16. (Original) A composition according to claim 15, wherein said silicates are chosen from analcime, chabazite, gmelinite, harmotome, levynite, mordenite, epistilbite,

heulandite, natrolite, stilbite, edingtonite, mesolite, scolecite, thomosonite, brewsterite, faujasite, gismondine, laumontite, phillipsite, and aluminosilicate.

17. (Original) A composition according to claim 15, wherein said silicates are chosen from zeolites.

18. (Original) A composition according to claim 15, wherein said silicates are chosen from zeolite clays.

19. (Original) A composition according to claim 1, further comprising at least one solvent.

20. (Original) A composition according to claim 19, wherein said at least one solvent is chosen from DMSO and water.

21. (Cancelled).

22. (Currently amended) A composition according to ~~claim 21~~ claim 1, wherein said at least one complexing agent is chosen from chelating agents, sequestering agents and salts of any of the foregoing.

23. (Currently amended) A composition according to ~~claim 24~~ claim 1, wherein said dissociation is chosen from partial dissociation and full dissociation.

24. (Currently amended) A composition according to ~~claim 24~~ claim 1, wherein at least one entity chosen from said least one hydroxide compound and said at least one complexing agent is formulated with at least one oxidizing agent.

25. (Original) A composition according to claim 22, wherein said chelating agents are chosen from ethylene-diaminetetraacetic acid (EDTA), nitrilotriacetic acid and ethyleneglycol-bis( $\beta$ -amino-ethyl ether)-N,N-tetraacetic acid.

26. (Original) A composition according to claim 22, wherein said sequestering agents are chosen from hydroxy carboxylic acids.

27. (Original) A composition according to claim 26, wherein said hydroxy carboxylic acids are chosen from gluconic acid, citric acid and tartaric acid.

28. (Original) A composition according to claim 22, wherein said at least one complexing agent is chosen from amino acids and crown ethers.

29. (Original) A composition according to claim 28, wherein said amino acids are monosodium glutamate.

30. (Original) A composition according to claim 22, wherein said at least one complexing agent is chosen from phosphates demonstrating chelating properties, phosphates demonstrating sequestering properties, phosphonates demonstrating chelating properties, phosphonates demonstrating sequestering properties, silicates demonstrating chelating properties and silicates demonstrating sequestering properties.

31. (Original) A composition according to claim 30, wherein said at least one complexing agent is chosen from tripotassium phosphate and trisodium phosphate.

32. (Original) A composition according to claim 30, wherein said at least one complexing agent is chosen from disodium silicate and dipotassium silicate.

33. (Currently amended) A composition according to ~~claim 24~~ claim 1, wherein said at least one complexing agent is chosen from organic acids and salts thereof.

34. (Currently amended) A composition according to ~~claim 24~~ claim 1, wherein said at least one complexing agent is chosen from mono-hydroxycarboxylic acids, dihydroxycarboxylic acids, polyhydroxycarboxylic acids, mono-aminocarboxylic acids, di-aminocarboxylic acids, poly-aminocarboxylic acids, mono-hydroxysulfonic acids, di-hydroxysulfonic acids, polyhydroxysulfonic acids, mono-hydroxyphosphonic acids, dihydroxyphosphonic acids, polyhydroxyphosphonic acids, mono-aminophosphonic acids, diaminophosphonic acids and polyaminophosphonic acids.

35. (Currently amended) A composition according to ~~claim 24~~ claim 1, wherein said at least one complexing agent is chosen from ethylene diamine tetraacetic acid (EDTA), N-(hydroxyethyl) ethylene diamine triacetic acid, aminotrimethylene phosphonic acid, diethylenetriamine-pentaacetatic acid, lauroyl ethylene diamine triacetic acid, nitrilotriacetic acid, iminodisuccinic acid, tartaric acid, citric acid, N-2-hydroxyethyliminodiacetic acid and salts of any of the foregoing.

36. (Original) A composition according to claim 35, wherein said at least one complexing agent is chosen from sodium EDTA, lithium EDTA, potassium EDTA and guanidine EDTA.

37. (Currently amended) A composition according to ~~claim 24~~ claim 1, wherein said at least one complexing agent and said at least one hydroxide compound form at least one complexing agent-counter ion complex.

38. (Original) A composition according to claim 37, wherein said composition comprises at least two complexing agents.

39. (Original) A composition according to claim 1, further comprising at least one additive chosen from dyes, anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, silicones, silicone derivatives, screening agents, preserving agents, proteins, vitamins, polymers, plant oils, mineral oils and synthetic oils.

40. (Original) A composition according to claim 1, wherein said composition is in the form of an oil-in-water emulsion, a water-in-oil emulsion, a dispersion, a suspension, a cream, a foam, a gel, a spray, a powder or a liquid.

41. (Original) A composition according to claim 1, wherein said keratinous fibers are chosen from hair.

42. (Original) A composition according to claim 1, wherein said composition is heat-activated.

43. (Currently amended) A composition for lantionizing keratinous fibers to achieve relaxation of said keratinous fibers comprising:

(i) at least one hydroxide compound; ~~and~~

(ii) at least one oxidizing agent; ~~and~~

(iii) at least one complexing agent effective for dissociating the at least one hydroxide compound in a sufficient quantity to effect lantionization of keratinous fibers,

~~wherein said at least one hydroxide compound and said at least one oxidizing agent are present in a combined amount effective to relax said keratinous fibers; and~~

~~further wherein said wherein said~~ at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 2% by weight relative to the total weight of the composition.

44. (Currently amended) A composition for lanthionizing keratinous fibers to achieve relaxation of said keratinous fibers comprising:

(i) at least one hydroxide compound; and

(ii) at least one oxidizing agent, ; and

(iii) at least one complexing agent effective for dissociating the at least one hydroxide compound in a sufficient quantity to effect lanthionization of keratinous fibers,

~~wherein said at least one hydroxide compound and said at least one oxidizing agent are present in a combined amount effective to relax said keratinous fibers; and~~

further wherein said ~~wherein said~~ at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 1% by weight relative to the total weight of said composition.

45. (Currently amended) A composition for lanthionizing keratinous fibers to achieve relaxation of said keratinous fibers comprising:

(i) at least one hydroxide compound; and

(ii) at least one oxidizing agent, ; and

(iii) at least one complexing agent effective for dissociating the at least one hydroxide compound in a sufficient quantity to effect lanthionization of keratinous fibers

~~wherein said at least one hydroxide compound and said at least one oxidizing agent are present in a combined amount effective to relax said keratinous fibers; and~~

further wherein said ~~wherein said~~ at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 0.5% by weight relative to the total weight of said composition.

46. (Withdrawn) A method for lanthionizing keratinous fibers to achieve relaxation of said keratinous fibers comprising:

(i) generating hydroxide ions in at least one solvent, wherein said step of generating comprises including at least one hydroxide compound and at least one oxidizing agent in said at least one solvent;

(ii) applying a composition comprising said generated hydroxide ions to keratinous fibers for a sufficient period of time to lanthionize at least one of said keratinous fibers; and

(iii) heating said keratinous fibers,

wherein said at least one hydroxide compound and said at least one oxidizing agent are present in a combined amount effective to relax said keratinous fibers, further wherein said composition is applied prior to said heating or during said heating.

47. (Withdrawn) A method according to claim 46, further comprising shampooing said keratinous fibers subsequent to said heating.

48. (Withdrawn) A method according to claim 47, further comprising rinsing said keratinous fibers subsequent to said shampooing.

49. (Withdrawn) A method according to claim 46, further comprising rinsing said keratinous fibers prior to said shampooing.

50. (Withdrawn) A method according to claim 46, wherein said composition is applied prior to said heating and during said heating.

51. (Withdrawn) A method according to claim 46, wherein said at least one hydroxide compound is chosen from alkali metal hydroxides, alkaline earth metal hydroxides, transition metal hydroxides, lanthanide metal hydroxides, actinide metal hydroxides, Group III hydroxides, Group IV hydroxides, Group V hydroxides, Group VI



hydroxides, organic hydroxides, and compounds comprising at least one hydroxide substituent which is at least partially hydrolyzable.

52. (Withdrawn) A method according to claim 51, wherein said at least one hydroxide compound is chosen from sodium hydroxide, lithium hydroxide, and potassium hydroxide.

53. (Withdrawn) A method according to claim 52, wherein said at least one hydroxide compound is sodium hydroxide.

54. (Withdrawn) A method according to claim 46, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 2.5% by weight relative to the total weight of said composition.

55. (Withdrawn) A method according to claim 54, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 2% by weight relative to the total weight of said composition.

56. (Withdrawn) A method according to claim 55, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 1% by weight relative to the total weight of said composition.

57. (Withdrawn) A method according to claim 56, wherein said at least one hydroxide compound is present in an amount such that the amount of hydroxide ion ranges from 0.01% to 0.5% by weight relative to the total weight of said composition.

58. (Withdrawn) A method according to claim 46, wherein said at least one oxidizing agent is chosen from hydrogen peroxide, urea peroxide, alkali metal bromates and persalts.

59. (Withdrawn) A method according to claim 46, wherein said at least one oxidizing agent is chosen from hydrogen peroxide.

60. (Withdrawn) A method according to claim 46, wherein said at least one oxidizing agent is present in an amount ranging from 1% to 12% by weight relative to the total weight of the composition.

61. (Withdrawn) A method according to claim 60, wherein said at least one oxidizing agent is present in an amount ranging from 3% to 6% by weight relative to the total weight of the composition.

62. (Withdrawn) A method according to claim 46, wherein said at least one solvent is chosen from DMSO and water.

63. (Withdrawn) A method according to claim 46, wherein said composition further comprises at least one cation exchange composition.

64. (Withdrawn) A method according to claim 63, wherein said at least one cation exchange composition is chosen from clays.

65. (Withdrawn) A method according to claim 64, wherein said at least one cation exchange composition is chosen from silicates.

66. (Withdrawn) A method according to claim 65, wherein said silicates are chosen from analcime, chabazite, gmelinite, harmotome, levynite, mordenite, epistilbite, heulandite, natrolite, stilbite, edingtonite, mesolite, scolecite, thomosonite, brewsterite, faujasite, gismondine, laumontite, phillipsite, and aluminosilicate.

67. (Withdrawn) A method according to claim 65, wherein said silicates are chosen from zeolites.

68. (Withdrawn) A method according to claim 65, wherein said silicates are chosen from zeolite clays.

69. (Withdrawn) A method according to claim 46, wherein said composition further comprises at least one complexing agent effective for dissociating said at least

one hydroxide compound in a sufficient quantity to effect lanthionization of said keratinous fibers.

70. (Withdrawn) A method according to claim 69, wherein said at least one complexing agent is chosen from chelating agents and sequestering agents and salts of any of the foregoing.

71. (Withdrawn) A method according to claim 69, wherein said dissociation is chosen from partial dissociation and full dissociation.

72. (Withdrawn) A method according to claim 69, wherein at least one entity chosen from said least one hydroxide compound and said at least one complexing agent is formulated with at least one oxidizing agent.

73. (Withdrawn) A method according to claim 70, wherein said chelating agents are chosen from ethylene-diaminetetraacetic acid (EDTA), nitrilotriacetic acid and ethyleneglycol-bis( $\beta$ -amino-ethyl ether)-N,N-tetraacetic acid.

74. (Withdrawn) A method according to claim 70, wherein said sequestering agents are chosen from hydroxy carboxylic acids.

75. (Withdrawn) A method according to claim 70, wherein said hydroxy carboxylic acids are chosen from gluconic acid, citric acid and tartaric acid.

76. (Withdrawn) A method according to claim 69, wherein said at least one complexing agent is chosen from amino acids and crown ethers.

77. (Withdrawn) A method according to claim 69, wherein said amino acids are monosodium glutamate.

78. (Withdrawn) A method according to claim 69, wherein said at least one

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complexing agent is chosen from phosphates demonstrating chelating properties, phosphates demonstrating sequestering properties, silicates demonstrating chelating properties and silicates demonstrating sequestering properties.

79. (Withdrawn) A method according to claim 78, wherein said at least one complexing agent is chosen from tripotassium phosphate and trisodium phosphate.

80. (Withdrawn) A method according to claim 78, wherein said at least one complexing agent is chosen from disodium silicate and dipotassium silicate.

81. (Withdrawn) A method according to claim 69, wherein said at least one complexing agent is chosen from organic acids and salts thereof.

82. (Withdrawn) A method according to claim 81, wherein said at least one complexing agent is chosen from mono-hydroxycarboxylic acids, dihydroxycarboxylic acids, polyhydroxycarboxylic acids, mono-aminocarboxylic acids, di-aminocarboxylic acids, poly-aminocarboxylic acids, mono-hydroxysulfonic acids, di-hydroxysulfonic acids, polyhydroxysulfonic acids, mono-hydroxyphosphonic acids, dihydroxyphosphonic acids, polyhydroxyphosphonic acids, mono-aminophosphonic acids, diaminophosphonic acids and polyaminophosphonic acids.

83. (Withdrawn) A method according to claim 69, wherein said at least one complexing agent is chosen from ethylene diamine tetraacetic acid (EDTA), N-(hydroxyethyl) ethylene diamine triacetic acid, aminotrimethylene phosphonic acid, diethylenetriamine-pentaacetate acid, lauroyl ethylene diamine triacetic acid, nitrilotriacetic acid, iminodisuccinic acid, tartaric acid, citric acid, N-2-hydroxyethyliminodiacetic acid and salts of any of the foregoing.

84. (Withdrawn) A method according to claim 83, wherein said at least one

complexing agent is chosen from sodium EDTA, lithium EDTA, potassium EDTA and guanidine EDTA.

85. (Withdrawn) A method according to claim 69, wherein said at least one complexing agent and said at least one hydroxide compound form at least one complexing agent-counter ion complex.

86. (Withdrawn) A method according to claim 85, wherein said composition comprises at least two complexing agents.

87. (Withdrawn) A method according to claim 46, wherein said composition further comprises at least one additive chosen from dyes, anionic surfactants, cationic surfactants, nonionic surfactants, amphoteric surfactants, fragrances, silicones, silicone derivatives, screening agents, preserving agents, proteins, vitamins, plant oils, mineral oils and synthetic oils.

88. (Withdrawn) A method according to claim 46, wherein said composition is in the form of an oil-in-water emulsion, a water-in-oil emulsion, a dispersion, a suspension, a cream, a foam, a gel, a spray, a powder or a liquid.

89. (Withdrawn) A method according to claim 46, wherein said keratinous fibers are hair.

90. (Withdrawn) A multicompartment kit for lanthionizing keratinous fibers to achieve relaxation of said keratinous fibers comprising:

(a) a first compartment comprising a first composition, and

(b) a second compartment comprising a second composition,

wherein said first composition comprises at least one hydroxide compound; and

wherein said second composition comprises at least one oxidizing agent.

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91. (Withdrawn) A multicompartment kit according to claim 90, wherein at least one of said first composition and said second composition further comprises at least one cation exchange composition.

92. (Withdrawn) A multicompartment kit according to claim 90, wherein at least one of said first composition and said second composition further comprises at least one complexing agent effective for dissociating the at least one hydroxide compound in a sufficient quantity to effect lanthionization of keratinous fibers.